

(07-03) O Approved for use through 07/31/2003. OMB 0651-0032 U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCEN

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UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No.	960296.98989				
First Inventor	Jonathan C. Makielski				
Title	SODIUM CHANNEL ALPHA SUBUNIT VARIANTS				
5 Ma-#1 -t -1 Ma	ELI944437806LIS				

(Only for n	new nonprovisional applications under 37 CFR 1.53(b))	Express Mail Label No.	EU944437	7806US			
See MPEP o	APPLICATION ELEMENTS chapter 600 concerning utility patent application contents.	ADDRESS TO: Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450					
2. Submit 2. Applica See 37 3. Specific (preferm - Descr - Cross - Stater - Refere or a ce - Backg - Brief 5 - Brief 1 - Detaili - Claim	red arrangement set forth below) iptive title of the invention Reference to Related Applications ment Regarding Fed sponsored R & D ence to sequence listing, a table, omputer program listing appendix ground of the Invention Summary of the Invention Description of the Drawings (if filed) ed Description	7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. ☑ Computer Readable Form (CRF) b. Specification Sequence Listing on: i. ☐ CD-ROM or CD-R (2 copies); or ii. ☑ Paper c. ☑ Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS					
4. Drawin 5. Oath or Dec	ng(s) (35 U.S.C. 113) [Total Sheets6	9. Assignment Paper 10. 37 CFR 3.73(b) (when there is a English Translation Discontinuous Statement (IDS)	Statement an assignee) ition Docume closure	ent <i>(if appli</i>	Power of Attorney		
b. Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) 13. Preliminary Amendment 14. Return Receipt Postcard (MPEP)			MPEP 503)				
	DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). ication Data Sheet. See 37 CFR 1.76	(Should be specifically itemized) 15. Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 17. Other:					
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:							
Continuation Divisional Continuation-in-part (CIP) of prior application No.: Prior application information: Examiner Art Unit:							
For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.							
19. CORRESPONDENCE ADDRESS							
	ner Number:	OR L	Correspo	ndence ad	dress below		
Name	Bennett J. Berson						
Address	Quarles & Brady LLP P.O. Box 2113				· · · · · · · · · · · · · · · · · · ·		
City	Madison	State WI		Zip Code	33701-2113		
Country (Print/T		608.251.5000		Fax	608.251.9166		
Name (Print/Type) Bennett J. Berson Registration No. (Attorney/Agent) 37,094 Signature Date Date							
Gigilature	Spuil Beron			Vale (08/01/2003		

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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FEE TRANSMITTAL

PTO/SB/17 (05-03)

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for FY 2003 Effective 01/01/2003. Patent fees are subject to annual revision.		_ H	Applic	alion	Numbe	51	· · · · · · · · · · · · · · · · · · · 			
		L	Filing Date							
			First Named Inventor		tor Jonath	an C.	Makielski			
			Exam	iner N	ame					
Applicant claims small entity status. See 37 CFR 1.27			Art Ur	nit				-		
TOTAL AMOUNT O	OF PAYMENT	(\$) 1,290.00	Attorney Docket No. 960296.98989							
METHOD OF	PAYMENT (check	all that apply)	FEE CALCULATION (continued)							
Check Credit	card Money	Other None	3. ADDITIONAL FEES							
Deposit Account:	Order L			Entity						
Deposit 47 0055		Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee i	Descriptio	n	Fee Paid	
Account Number		1051	130	2051	65	Surcharge - late	filing fee or	oath		
Deposit Account Quarles & Brady LLP		1052	50	2052		Surcharge - late cover sheet	provisional	filing fee or		
Name The Director is authorized to: (check all that apply)		1053	130	1053	130	Non-English spe	ecification			
Charge fee(s) indicate		dit any overpayments	1812	2,520	1812	2,520	For filing a requi	est for ex pa	rte reexamination	┝──┤┇
Charge any additiona	I fee(s) during the pend	lency of this application	1804	920*	1804	920*	Requesting pub Examiner action		IR prior to	
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.		1805	1,840*	1805	1,840*	Requesting put Examiner action	olication of S	IR after		
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1. BASIC FILING F			1252	410	2252	205	Extension for re	eply within s	econd month	
Large Entity Small Enti	ty		1253	930	2253	465	Extension for re	eply within th	nird month	
Fee Fee Fee Fee Code (\$)	Fee Description	Fee Paid	1254	1,450	2254	725	Extension for re	eply within fo	ourth month	I
1001 750 2001 375	5 Utility filing fee	750.00	1255	1,970	2255	985	Extension for re	eply within fit	fth month	├ ──┤┃
1002 330 2002 16	5 Design filing fee	750.00	1401	320	2401	160	Notice of Appea	al		
1003 520 2003 260	0 Plant filing fee		1402	320	2402	160	Filing a brief in	support of a	n appeal	├ ──┤╽
1004 750 2004 37	5 Reissue filing fe	e	1403	280	2403	140	Request for ora	I hearing		<u> </u>
1005 160 2005 80	0 Provisional filing	fee	1451	1,510	1451	1,510	Petition to instit	ute a public	use proceeding	
SUBTOTAL (1) (\$) 750.00		1452	110	2452	55	Petition to reviv	e - unavoida	able		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE			1,300	2453		Petition to reviv				
		Fee from		1,300	2501		Utility issue fee		•	
Total Claims 50	Extra Claims -20** = 30 X	18.00 = 540.00	1502	470 630	2502 2503		Design issue fee Plant issue fee			
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Fee Fee Fee I	Fee Fee Descrip	<u>ition</u>					Recording each			
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1201 84 2201		aims in excess of 3	1809	750	2809	375	Filing a submis (37 CFR 1.129)		al rejection	
1203 280 2203	140 Multiple depen	dent claim, if not paid	1810	750	2810	375	For each addition	onal invention		
1204 84 2204	42 ** Reissue inde over original	ependent claims	4004	750	2801	275	examined (37 C		• •	
1205 18 2205	-	·	1801 1802		1802		Request for ex		amination (RCE)	
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent				l			of a design app			<u> </u>
SUBTOTAL (2) (\$) 540.00				fee (sp						<u> </u>
*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 0.00										
SUBMITTED BY (Complete (if applicable)										
Name (Print/Type) Bennett J. Berson				Registra Attorney		37,	,094	Telephone	608.251.50	00
Signature Date 08/01/2003										

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One South Pinckney Street Post Office Box 2113 Madison, Wisconsin 53701-2113 Tel 608.251.5000 Fax 608.251.9166 www.quarles.com Attorneys at Law in: Phoenix and Tucson, Arizona Naples and Boca Raton, Florida Chicago, Illinois (Quarles & Brady LLC) Milwaukee and Madison, Wisconsin

August 1, 2003

MAIL STOP PATENT APPLICATION Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Re: Filing Patent Application

Dear Sir:

Enclosed for filing please find a patent application entitled:

SODIUM CHANNEL ALPHA SUBUNIT VARIANTS

by Jonathan C. Makielski Bin Ye Michael J. Ackerman

The undersigned hereby certifies that this document is being deposited with the United States Postal Service today, August 1, 2003, by the "Express Mail" service, utilizing Express Mail label number EU944437806US, addressed to: MAIL STOP PATENT APPLICATION, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

Please indicate receipt of this application by returning the attached postcard with the official Patent and Trademark Office receipt and serial number stamped thereon.

Respectfully submitted,

Enclosures

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